

i) benzaldehyde, THF / EtOH, r.t., 24h, ii) NaBH_4 , THF, r.t., 7h, 74% (2 steps total),
 iii) 1-pyrenealdehyde, THF / MeOH, r.t., 20h, 93%, iv) NaBH_4 , MeOH, r.t., 3h, 92%
 v) 2, K_2CO_3 , MeCN, reflux, 20h, vi) THF / water, r.t., 3h, 35%

Figure 1

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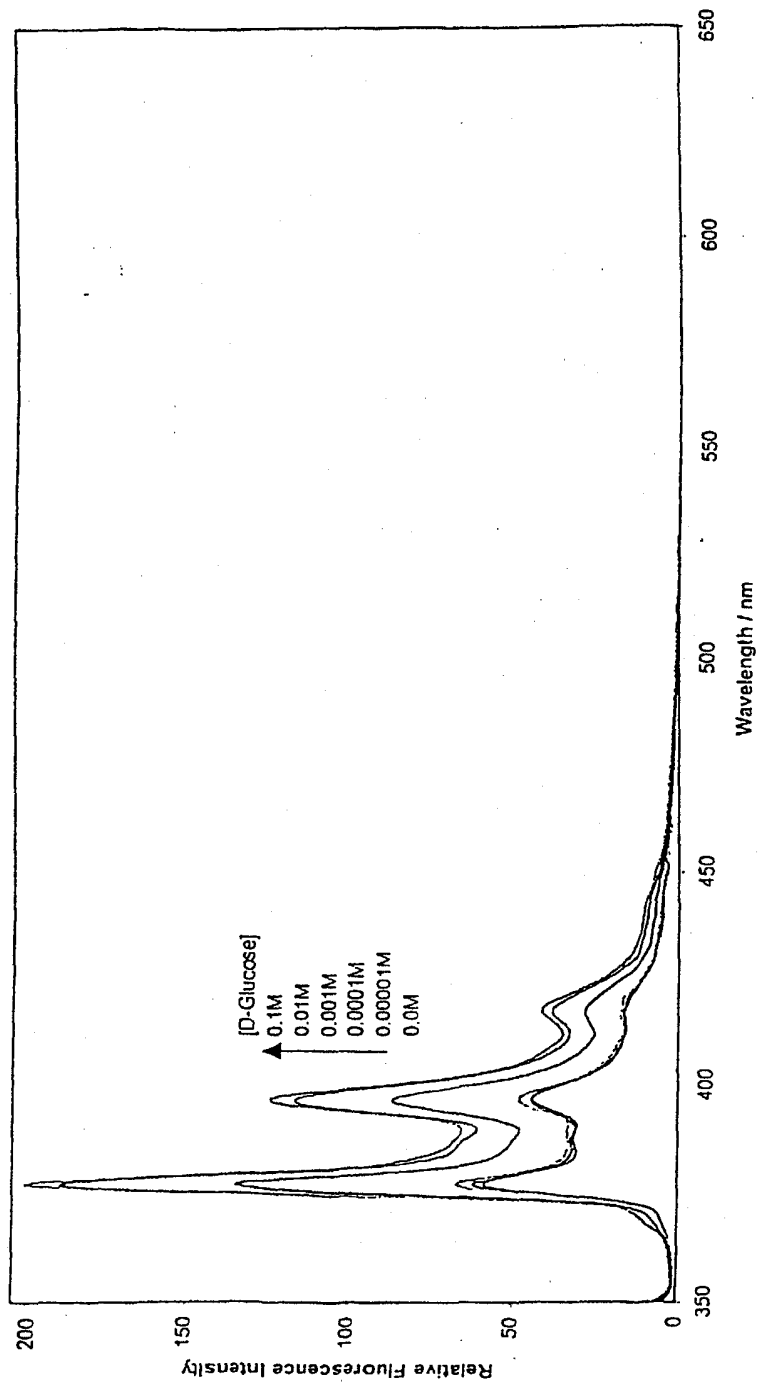


Figure 2

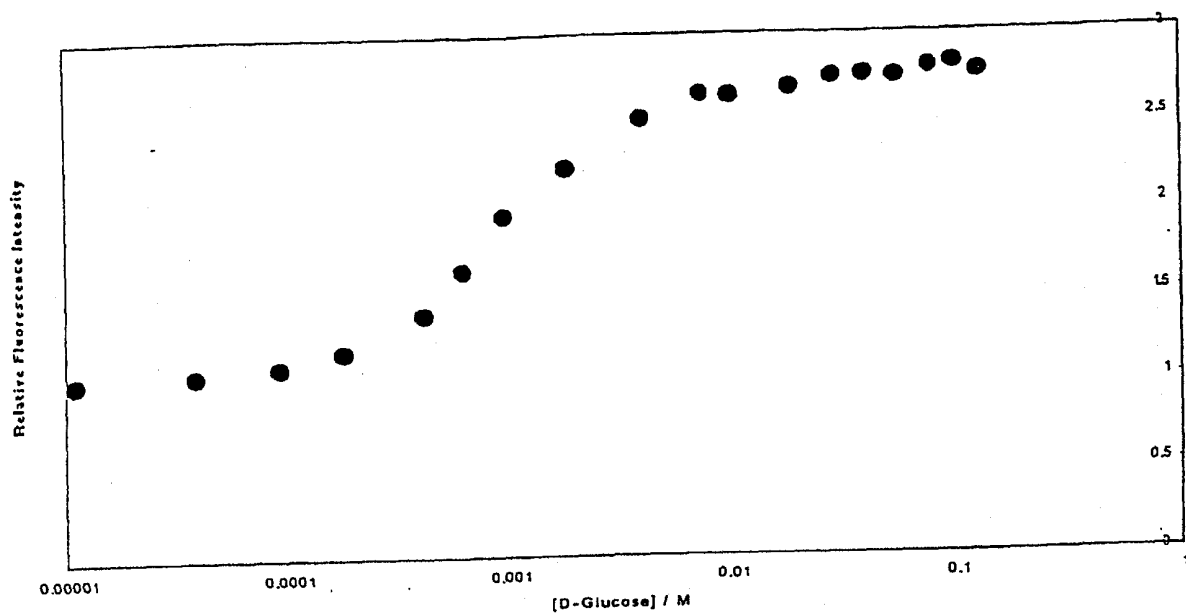


Figure 3